CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

ORDER NO. R5-2002-0096

REQUIRING NEVADA COUNTY SANITATION DISTRICT NO. 1 LAKE OF THE PINES WASTEWATER TREATMENT PLANT TO CEASE AND DESIST FROM DISCHARGING CONTRARY TO REQUIREMENTS

The California Regional Water Quality Control Board, Central Valley Region, (hereafter referred to as "Regional Board") finds:

- 1. On 7 June 2002, the Regional Board adopted Waste Discharge Requirements (WDR) Order No. R5-2002-0095, for the Nevada County Sanitation District No. 1's, Lake of the Pines (Discharger) Wastewater Treatment Plant. WDR Order No. R5-2002-0095 regulates the discharge of approximately 0.539 million gallons per day (mgd) of treated domestic wastewater to Magnolia Creek, which is tributary to the Bear River. The design flow of the facility is 0.72 mgd.
- 2. WDR Order No. R5-2002-0095 contains Effluent Limitations for ammonia, nitrite, nitrate plus nitrite and aluminum as contained in B.2, which read in part as follows:

Constituents	<u>Units</u>	Average Monthly	Average <u>4-Day</u>	Average <u>Daily</u>	Average <u>1-Hour</u>
Ammonia (as N)	mg/ <i>l</i> lbs/day ¹	Attachment B			Attachment C
Nitrate + Nitrite (as N)	mg/l lbs/day ¹	10 60	 		
Nitrite (as N)	mg/l lbs/day^1	1 6	 	 	

The mass limit (lb/day) for ammonia shall be equal to the concentration limit (from Attachments) multiplied by the design flow of 0.72 mgd and the unit conversion factor of 8.345 (see footnote 1 for equation).

3. During low temperature conditions, the current plant design and operation result in incomplete nitrification and/or denitrification of wastewater and increased effluent ammonia, nitrate, and nitrite concentrations. Failure to nitrify the wastewater would result in concentrations of ammonia, nitrite, and nitrate plus nitrite that exceed Effluent Limitations.

4. WDR Order No. R5-2002-0095 contains Effluent Limitation B.2 for aluminum, which reads as follows:

		Average	Average	Average	Average
Constituents	<u>Units</u>	<u>Monthly</u>	<u>4-Day</u>	<u>Daily</u>	<u>1-Hour</u>
Aluminum	μ g/ l		87		750
	lbs/day ¹		0.522		4.5

Based upon a design treatment capacity of 0.72 mgd (x mg/l x 8.345 x 0.72 mgd = y lbs/day)

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- 5. The Basin Plan prohibits the discharge of toxic materials in toxic concentrations. Based on information included in analytical laboratory reports submitted by the Discharger, aluminum in the discharge has a reasonable potential to cause or contribute to an in-stream excursion above a level necessary to protect aquatic life. U.S. EPA developed National Recommended Ambient Water Quality Criteria for protection of freshwater aquatic life for aluminum. Aluminum was detected in an effluent sample collected 6 April 2001 at a concentration of 820 μg/l. The recommended continuous concentration (maximum four-day average concentration) is 87 μg/l and the recommended maximum concentration (maximum one-hour average concentration) is 750 μg/l.
- 6. Based on the above findings, this discharge represents a threatened discharge of waste in violation of WDR Order No. R5-2002-0095, Effluent Limitations for ammonia, nitrate plus nitrite, nitrite, and aluminum.
- 7. In order to consistently comply with the ammonia, nitrate plus nitrite, and nitrite Effluent Limitations, nitrification and denitrification of the wastewater are necessary.
- 8. In order to consistently comply with the pH Effluent Limitation, a modified pH adjustment system may be necessary.
- 9. In accordance with California Water Code (CWC) Section 13385(j)(3), the Regional Board finds that, based upon operational capabilities, the Discharger is not able to consistently comply with the ammonia, nitrate plus nitrite, nitrite, and pH effluent limitations. The ammonia, nitrate plus nitrite, nitrite, and pH limitations are new requirements that become applicable to the permit after the effective date of adoption of the waste discharge requirements, and after 1 July 2000, for which new or modified control measures are necessary in order to comply with the limitation, and the new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days.

Since the time schedules for completion of actions necessary to achieve full compliance exceed one year, interim requirements and dates for their achievement are included in this Order. This time schedule does not exceed five years. Source control and treatment actions can be taken to correct the violations that would otherwise be subject to mandatory penalties under California Water Code section 13385(h) and (i), and the Discharger can take reasonable measures to achieve compliance within five (5) years from the date the waste discharge requirements were required to be reviewed pursuant to Section 13380.

California Water Code Section 13385(j)(3) requires the Discharger to prepare and implement a pollution prevention plan pursuant to Section 13263.3 of the California Water Code. A pollution prevention plan addresses only those constituents that can be effectively reduced by source control measures. Ammonia, nitrate plus nitrite, and nitrite cannot be significantly reduced through source control measures in domestic wastewater, but aluminum can be reduced through source control measures. Therefore, this Order requires a pollution prevention plan.

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Compliance with this Order exempts the Discharger from mandatory minimum penalties for violations of effluent ammonia, nitrate plus nitrite, nitrite, and aluminum limitations only, in accordance with California Water Code Section 13385(j)(3).

- 10. On 7 June 2002, in Sacramento, California, after due notice to the Discharger and all other affected persons, the Regional Board conducted a public hearing at which evidence was received to consider a Cease and Desist Order to establish a time schedule to achieve compliance with waste discharge requirements.
- 11. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, *et seq.*), in accordance with Section 15321 (a)(2), Title 14, California Code of Regulations.
- 12. Any person adversely affected by this action of the Regional Board may petition the State Water Resources Control Board (State Board) to review the action. The petition must be received by the State Board Office of the Chief Counsel, P.O. Box 100, Sacramento, CA, 95812-0100, within 30 days of the date on which the action was taken. Copies of the law and regulations applicable to filing petitions will be provided on request.

IT IS HEREBY ORDERED THAT:

1. The Nevada County Sanitation District No. 1 shall cease and desist from discharging and threatening to discharge contrary to Waste Discharge Requirements Order No. R5-2002-0095, Effluent Limitations for ammonia, nitrate plus nitrite, nitrite, and aluminum.

2. The Nevada County Sanitation District No. 1 shall comply with the following time schedule to assure compliance with the ammonia, nitrate plus nitrite, nitrite, and aluminum Effluent Limitations contained in Waste Discharge Requirements Order NO. R5-2002-0095 as described in the above Findings:

Task
Progress Report/Implementation Schedule

Compliance Date
31 October 2002

Progress Reports¹

Pollution Prevention Plan

30 April and 31 October of each year
31 October 2002

Achieve Full Compliance 30 April 2007

¹ The progress reports shall detail what steps have been implemented towards achieving compliance with waste discharge requirements, including construction progress, evaluate the effectiveness of the implemented measures, and assess whether additional measures are necessary to meet the time schedule.

3. Until full compliance with Waste Discharge Requirements Order NO. R5-2002-0095, Effluent Limitations B.1 is achieved, the Discharger shall operate the treatment plant in a nitrification/denitrification mode to the maximum extent practicable.

4. If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may apply to the Attorney General for judicial enforcement or issue a complaint for Administrative Civil Liability.

I, THOMAS R. PINKOS, Acting Executive Officer, do herby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 7 June 2002.

THOMAS R. PINKOS, Acting Executive Officer